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Gavin Newsom
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MEMORANDUM

TO: Todd Sax, D.Env.
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FROM: Hortensia Muniz, P.E.
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Site Mitigation and Restoration Program

SUBJECT: ACTION MEMORANDUM: TIME-CRITICAL REMOVAL ACTION (TCRA),
GREENVILLE, PLUMAS COUNTY, CALIFORNIA

DATE: October 12, 2023

1. Purpose

The purpose of this Action Memorandum is to document the Department of Toxic Substances Control's (DTSC) decision to undertake a Time-Critical Removal Action (TCRA) to address lead contaminated soil at properties in Greenville, California. Following the 2021 Dixie Fire, the Governor's Office of Emergency Services (CalOES)—the agency in charge of administering wildfire cleanup for the State of California—identified the properties at issue for evaluation of lead cleanup.

A few months later, CalOES requested the DTSC – Site Mitigation and Restoration Program's (Site Mitigation) assistance with the evaluation and cleanup of pre-fire levels of lead at properties that exceeded the State's residential screening level of 80 milligrams per kilogram (mg/kg) or the commercial screening level of 500 mg/kg. DTSC determined the levels of residual lead represented an exposure risk to human health and the environment. DTSC also determined the removal of the contaminated soil was time-sensitive because the lead removal work was required before property owners could rebuild.

This Action Memorandum identifies the selected removal action for Greenville, which was developed in accordance with the California Health and Safety Code;¹ and is consistent with, based upon, and no less stringent than the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).²

This Action Memorandum meets the criteria for initiating a removal action under the NCP,³ to mitigate the threat posed to public health by the presence of the hazardous substances at the properties in Greenville.

DTSC determined a TCRA was appropriate to timely remediate the uncontrolled hazardous substances present at Greenville properties and the risks those conditions posed to human health or the environment.

2. Background, Property Prioritization Criteria, and Property Conditions

2.1 Background

In the summer of 2021, the Dixie Fire burned 963,309 acres of land in Northern California and affected the counties of Butte, Plumas, Lassen, Shasta, and Tehama. Because of the magnitude of losses to the people, their property, and the communities affected by the Dixie Fire, Governor Newsom declared a state of emergency and signed Executive Order N-24-21 to support impacted communities and bolster wildfire response and recovery efforts. The State also secured federal assistance through the Federal Emergency Management Agency (FEMA) to support the response to the Dixie Fire.

Greenville is an unincorporated community in the semi-mountainous terrain of Plumas County (Figures 1, 2, and 3). The pre-fire population of Greenville was about 800 residents in an area of approximately eight square miles. The Dixie Fire destroyed large portions of Greenville, including 75% of its residential and commercial buildings. Following the Dixie Fire, the State provided Greenville with emergency assistance to remove hazardous wastes, debris, and hazardous trees.

As noted above, the wildfire cleanup response was administered by CalOES. CalOES mobilized DTSC's emergency response team for emergency Phase 1 cleanup operations to remove Household Hazardous Waste from properties impacted by the wildfires. And, CalOES mobilized the California Department of Resources Recycling

¹ Health and Safety Code, §§ 25358.3, 25355.5, 25356.1.5, 58009, 58010.

² Code of Federal Regulations, Title 40 (40 CFR), Part 300 (particularly Subpart E – Hazardous Substance Response, §§ 300.400 – 300.440).

³ 40 CFR, § 300.415.

and Recovery (CalRecycle) to conduct Phase 2 debris and hazard tree removal under the Consolidated Debris Removal Program.

Phase 2 debris and hazard tree removal activities included removal of ash and debris associated with burned structures and removing trees that pose a hazard. The ash and debris removal work included the scraping of three inches of soil beneath the ash and debris, collection of soil samples from the scraped area (burn scar) and testing of the soil for metals. Soil testing showed elevated concentrations of lead in a high percentage of the Greenville burn scar samples. If elevated metal concentrations were found in these samples, an additional three inches of soil was scraped, and another sample was collected. This process was repeated to a maximum depth of 12 inches below the ash and debris. In addition, soil borings were advanced outside of the burn scar to observe metal concentrations beyond the burn scar. This information was used to assess background concentrations and to evaluate pre-existing metal concentrations. Although these types of soil borings are typically collected approximately every one-quarter mile, CalRecycle decreased the spacing between borings in areas of Greenville because of the ubiquitous lead contamination in the downtown area. In some cases, multiple soil borings were collected on a property. In other cases, soil borings were used to represent pre-fire conditions for a group of adjacent properties. Generally, the presence of elevated lead concentrations in the soil boring samples raised concerns that widespread lead contamination might be present throughout Greenville, including beyond the burn scar.

Due to the elevated lead observed in the downtown Greenville area, in January 2022, CalOES requested assistance from Site Mitigation to assess the potential for widespread lead contamination. Additional soil sampling did not identify the presence of widespread or uniform pre-Dixie Fire metals contamination that might suggest that a single source was responsible for elevated lead concentrations in the downtown Greenville area. Site Mitigation was then mobilized to conduct the lead removal work pursuant to State law.

FEMA's reimbursement to the State for the Dixie Fire disaster recovery included activities associated with clean up of ash and debris associated with burned structures. FEMA's reimbursement to the State did not cover removal of soil with elevated lead if the lead appeared to be associated with a pre-Dixie Fire source.

And, due to the amount of soil that might require removal and the limited resources available to Plumas County, no local funding was available to remediate the lead-contaminated soil in Greenville.

In the summer of 2022, DTSC determined it was time-critical to address the elevated lead concentrations in Greenville because the contaminated soil needed to be removed before property owners could rebuild structures that were lost to the fire. To protect human health, safety and/or the environment, DTSC issued an Imminent and Substantial Endangerment Determination (ISE Determination) for properties with concentrations of lead in soil that exceeded California's residential or commercial screening levels. To implement a TCRA to address up to 125 lead-impacted properties, DTSC requested and secured funding from the State Legislature.

2.2 Property Prioritization Criteria

A property was eligible for consideration under DTSC's Cleanup Program if it: a) was zoned residential and showed lead concentrations exceeding 80 mg/kg or b) was zoned commercial/industrial and showed lead concentrations exceeding 500 mg/kg. DTSC prioritized such properties for cleanup using the following designations:

- **Priority 1 – Construction Ready (Highest Priority)**
Includes vulnerable property owners as identified by FEMA or Plumas County,⁴ construction-ready properties that exceed the residential or commercial lead thresholds (80 mg/kg or 500 mg/kg), and properties adjacent to school(s).
- **Priority 2 – Residential Use (Medium Priority)**
Includes all residential zoned properties not included in Priority 1 with lead concentrations above the residential screening level of 80 mg/kg. This also includes properties zoned as commercial, industrial, or other with lead concentrations below 500 mg/kg but over 80 mg/kg in exposed soil in an area of residential use.
- **Priority 3 – Commercial Use (Low Priority)**
Includes properties zoned as commercial, industrial, or other with lead concentrations that exceed 500 mg/kg.

The priority numbers for Greenville properties were determined based on the following:

- Lead concentrations relative to screening levels. DTSC has two screening levels for lead that are applicable to Greenville. The residential screening level is 80 mg/kg and the commercial screening level is 500 mg/kg.

⁴ Vulnerable property owners in this context, means those property owners who have very limited or no housing alternatives, or that are otherwise most heavily impacted by loss of use of their property.

- Property Zoning. Plumas County zoning allows commercial/industrial use on residentially zoned properties and residential use on commercial/industrial/other zoned properties. Any properties not categorized in Priority 1 that were zoned residential were placed into Priority 2, regardless of actual property use.
- Property Use. Commercial/Industrial/Other zoned properties were placed into the Priority 3 initially. Commercial/Industrial/Other property owners were interviewed to confirm the actual property use. DTSC moved to Priority 2 any Commercial/Industrial/Other properties that had a residential use or a mixed use with exposed soil where children might be expected to play.
- Property access. To participate in DTSC's Cleanup Program, DTSC required property owners to permit access to their properties by voluntarily signing access agreements. DTSC also confirmed property ownership before any site evaluation and/or TCRA field work began.

Where DTSC must prioritize the cleanup of certain properties over others due to limited resources, DTSC will prioritize the properties that have the higher potential for exposure of sensitive receptors to elevated concentrations of lead. In its determination, DTSC may consider and balance the following additional factors:

- the residual concentrations remaining in place;
- the location and/or proximity of the properties; and
- the size of the property and/or decision unit(s).

2.3 Site Conditions

Phase 2 cleared hazardous waste, ash, debris, and hazard trees from Greenville properties. Site conditions after Phase 2 varied from property to property. But in most cases, the properties were relatively bare, with little to no vegetation and signs of scraped areas where the structures, ash, and debris were removed. In rare cases, a structure survived the fire. Structural features, such as concrete or asphalt walkways, retaining walls, and fences, remained on some of the properties. Fire-damaged trees also remained on some properties.

A few structures in the downtown area survived the fire and returned to use, including the school, a grocery store, and a gas station. A higher percentage of structures survived the fire in the Kinder area neighborhood, located northwest of the downtown area; and the Hot Springs area neighborhood, to the east.

Some features on properties are not accessible and will not be excavated, including steep hillsides along the eastern portion of Main Street and creek beds along Wolf Creek.

3. Endangerment/Threats to Public Health or Welfare or the Environment and Statutory and Regulatory Authorities

The principal chemical of concern is lead. Lead is a neurotoxin that accumulates both in soft tissues and the bones. DTSC determined that a potential for complete exposure pathways may exist at the properties identified by CalOES. Resident and/or visitors may ingest or inhale bare or manually disturbed soils containing elevated concentrations of lead. The group most at risk to lead-related impacts are pregnant women (fetus), infants, and children under age seven.

The properties with lead concentrations that exceed applicable screening levels presented a threat to the public health or welfare and the environment and met the criteria for a removal action under the NCP.⁵ These criteria include, but are not limited to, the following:

3.1 40 CFR, section 300.415(b)(2)(i) - Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.

Exposure may occur from: direct ingestion of soil in yards, soil tracked indoors, house dust, inhalation of fugitive dust, and ingestion of vegetables grown in contaminated soil. Potential human receptors include residents and visitors, including children seven years old and younger.

Lead is a hazardous substance, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).⁶ The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body. Children's nervous systems are particularly vulnerable to lead toxicity. And, adults that experienced long-term exposure to lead have shown decreased nervous system function. For example, prolonged lead exposure may cause weakness in fingers, wrists, or ankles. Lead exposure may also cause small increases in blood pressure, particularly in middle-aged and older individuals, and anemia. Exposure to high lead levels can severely damage the brain and kidneys of adults or children and ultimately cause death. In pregnant women, high

⁵ 40 CFR, § 300.400 et seq.

⁶ 42 U.S.C., § 9601(14).

levels of exposure to lead may cause miscarriage. High-level lead exposure in men can damage the organs responsible for sperm production.⁷

3.2 40 CFR § 300.415(b)(2)(iv) - High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.

Lead-contaminated soil may migrate as airborne particulate matter, surface runoff, percolation into groundwater, through construction activities, by children transporting soil/dust into their homes after playing in contaminated soil, and by tracking in homes via foot traffic into residences.

3.3 40 CFR § 300.415(b)(2)(v) - Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

There is a threat of hazardous substance release from high winds and heavy rains dispersing surface particulate matter containing lead, resulting in exposure to children and adults who reside at the properties or who spend substantial time at the properties.

4. Selected TCRA: Excavation, Disposal, Backfill, and Land Use Controls

The TCRA selected by DTSC to address the elevated health risks associated with lead in Greenville includes the following components:

- Evaluation to determine if soil excavation is required to meet DTSC residential or commercial screening levels;
- Excavation of up to 18 inches of soil below original grade;
- Transportation of contaminated soil to an appropriate landfill for disposal;
- Collection of confirmation soil samples;
- Transportation of clean fill; and
- Placement and compaction of up to 18 inches of clean backfill in the excavation or burn scar areas.
- Institutional controls (ICs), land use covenants (LUCs), a local ordinance, or other land use controls for properties or portions of properties that are not suitable for unrestricted use.

The protectiveness of the TCRA combines removal of lead contaminated soil with the placement of a barrier of clean soil, which allows the property owner to conduct most daily activities without encountering contaminated soil.

⁷ Agency for Toxic Substances and Disease Registry (ATSDR), 2007, ToxFAQs Fact Sheet – Lead (CAS# 7439-92-1).

Following the removal action, if remaining contamination levels are not suitable for unrestricted use, land use controls may be placed on the property or portions of the property. Scenarios where lead may remain above unrestricted levels include the following:

- lead above unrestricted levels may be left in place at the bottom of the excavation.
- lead above unrestricted levels may be left in place along a hillside or edge of the creek or other area that is not accessible.
- lead above unrestricted levels may be left in place because the property owner did not allow DTSC to access the property to collect soil samples nor perform the removal action.
- lead above unrestricted levels may be left in place because properties zoned as commercial allows lead concentrations below 500 mg/kg.

Following completion of the removal actions, DTSC will identify the properties or portions of properties not suitable for unrestricted use. DTSC will work with property owners and Plumas County to develop appropriate land use controls for those properties. To ensure long term protectiveness, appropriate land use controls may include, but are not limited to:

- ICs⁸
- LUCs⁹
- Local Ordinance¹⁰

ICs are administrative and legal controls on land use that minimize the potential for exposure to contamination and/or protect the integrity of a response action. LUCs are agreements between DTSC and landowners that define the limitations applicable to a property. For example, a LUC may restrict certain soil management activities and/or prohibit future use of the property as a residence, hospital, school, and day care center. Once approved, a LUC is filed with the local county recorder's office and binds current

⁸ See DTSC. *Land Use Covenant Quick Reference Guide*. <https://dtsc.ca.gov/brownfields/land-use-covenant-quick-reference-guide/> ("[I]nstitutional controls help protect against unsafe exposure to hazardous substances on public or private property."); DTSC, Mar. 14, 2022. *Department of Toxic Substances Control Response Local Government Officials regarding soil contamination post-wildfires in Greenville, Plumas County, California*.

⁹ See California Code of Regulations, title 22 (22 CCR), § 67391.1; DTSC. *Land Use Covenants Regulations*. <https://dtsc.ca.gov/land-use-covenants-regulations/>; DTSC, May 5, 2023. *Response to Plumas County Letter, Time Critical Removal Action, Greenville, Plumas County, California*.

¹⁰ See, e.g., DTSC, Sept. 2005. *Fact Sheet: Sutter Creek approves special building and land use controls at and around Mesa De Oro*. https://dtsc.ca.gov/wp-content/uploads/sites/31/2017/11/MesaDeOro_FS_LandUse_0905.pdf.

and future owners and users to the defined limitations. LUCs may also include a five-year review of applicable properties to ensure the long-term effectiveness of the response action and any land use controls. A Plumas County ordinance could be designed to provide functionally equivalent restrictions to LUCs. For example, a local ordinance may provide public information about residual contamination in Greenville, include notice and disclosure components, and establish building and land use requirements for the town of Greenville.

A Plumas County ordinance may require property owners to apply for a permit before disturbing or excavating soil that may have residual contamination. Soil disturbance may include:

- Construction of new buildings, swimming pools, construction of decks, and room additions;
- Re-grading or contouring of lot or yard;
- Landscaping excavation;
- Work with underground utilities; and
- Road maintenance and construction.

A Plumas County ordinance may require all soil disturbance activities to follow best management practices as follows:

1. Plumas County may require best management practices to mitigate and control fugitive dusts at all properties during soil disturbance;
2. Plumas County may ask property owners to prepare excavation plans and soil management plans to avoid creating fugitive dusts.

A Plumas County ordinance may provide health advisories on lead exposure and require property owners to provide notice and obtain approval from Plumas County for specified activities. For example, a Plumas County ordinance may address the following:

- Types of Activities Impacting Exposure Risk
 - Landscaping and Gardening
 - Construction
 - Site Disturbance Procedures
- Shallow (Up to Two Feet Below Ground Surface [bgs]) Incidental Subsurface Intrusive Activities
 - Health advisories and educational materials
 - Health and Safety Procedures

- Construction and Other Non-Emergency Subsurface Intrusive Activities
 - Notifications and permit requirements
 - Initial Evaluation
 - Health and Safety Procedures
- Emergency Response Subsurface Disturbance Activities
 - Notifications and permit requirements
 - Health and Safety Procedures
- Soil Management for Emergency and Non-Emergency Response
 - Soil Storage and Stockpile Management
 - Soil On-Site Reuse Criteria
 - Offsite Soil Disposal
 - Decontamination
 - Dust Control /Action Levels.
 - Transportation Plan
 - Contingency Actions

DTSC will continue to work with Plumas County on the development of appropriate land use controls to protect public health and safety.

4.1 TCRA for the Properties

The TCRA proposed is necessary to mitigate actual or potential threats to public health, welfare, and the environment posed by the presence of uncontrolled releases of hazardous substances at the properties. Properties with elevated lead levels are those where the maximum sample concentration was greater than DTSC's residential or commercial screening levels.¹¹

Because of the time-critical nature of the work, a formal feasibility study to compare technical alternatives was not conducted. The DTSC guidance document, *Proven Technologies & Remedies Guidance, Remediation of Metals in Soil* (2008), identifies excavation and off-site disposal as the most selected technology for metals in soil. Capping is the second most selected technology. The TCRA selected excavation and offsite disposal at an appropriate landfill as its primary means of protecting residents from exposure to lead as it would eliminate the actual/potential exposure. Excavation is followed by backfilling, which provides a barrier of clean soil (capping) that allows the property owner to conduct most daily activities without encountering any residual

¹¹ Appendix A provides the maximum sample concentrations for each of the properties with elevated lead levels.

contaminated soil that may remain. DTSC's response also allows for other appropriate activities commonly conducted on environmental sites, such as sampling to evaluate the initial site concentrations on a property to determine the appropriate level of response.

Lead-impacted soil at the properties will be excavated in accordance with the TCRA Work Plan (WP) and the Engineering/Remediation Resources Group, Inc. (ERRG) TCRA WP Addendum (2022), as well as Property Specific Plans (PSPs).¹² DTSC determined the areas of excavation based on the concentrations of lead found in the soils and the accessibility of such soils for excavation. DTSC will excavate soil to depths up to 18 inches bgs or original grade. DTSC estimates it will excavate up to 97,816 banked cubic yards (bcy) of soil. ERRG will collect and analyze post-excavation confirmation samples from the bottom of the excavation, backfill the excavated area with up to 18 inches of clean soil, and compact the soil. Depending on the starting elevation of the burn scar, a site's elevation may be restored to original grade. DTSC will ensure that all excavated soil will be transported off-site and disposed of at an appropriate landfill, in accordance with the U.S. Environmental Protection Agency's Off-Site Rule.¹³

4.2 Project Schedule

On July 1, 2022, the State Legislature approved funding for the TCRA. DTSC reached agreements with the remediation and project management/quality control contractors in late July 2022 and mobilized equipment and personnel to Greenville shortly thereafter. In 2022, DTSC's field work began on August 16 and ceased on November 1, due to snow.

In 2023, DTSC's field work began on May 30; earthwork was completed by August 25, 2023, and all equipment and crew were demobilized by September 1, 2023.

After DTSC backfilled the properties, it invited property owners to attend an optional site walk to give property owners an opportunity to ask questions and discuss the TCRA activities. Following the site walk, the contractor will prepare and submit a Letter of Completion (LOC), which will provide a short description of the cleanup activities completed at the property. DTSC will send the LOC to the property owner and Plumas County Environmental Health to document completion of DTSC's TCRA activities on the property. The following table provides the tasks and deliverables for the removal activities.

¹² Appendix B provides the template used to generate the PSPs.

¹³ 40 CFR, § 300.440.

| Phase of Work | Activity/Deliverable |
|------------------|--|
| Outreach | Obtain and verify signed access agreements. |
| Field Work | Initiate property assessment – assess initial site conditions, survey property, survey and mark underground utilities survey, collect waste profile samples, and characterize waste for disposal. |
| | Generate PSP for each property. |
| | Notify property owner of start work date. |
| | Excavate soil, load into trucks, and transport offsite to landfill. |
| | Collect confirmation soil samples at the bottom of the excavation and transport to lab. |
| | Transport clean soil, place clean soil, grade, and compact. |
| | Install stormwater erosion controls. |
| | Perform optional site walk with property owner. |
| Property Closure | Generate LOC for each property. LOC summarizes the work conducted. LOC is sent to the property owner and Plumas County Environmental Health to document completion of work. |
| | Generate Completion Report (CR) for each property. CR includes backup laboratory reports, landfill manifests, and compaction test results. Electronic copy of the CR is sent to Plumas County Environmental Health. CR will be sent to property owners if requested. |
| Project Closeout | Complete TCRA CR, with summary of the TCRA project activities and cost analysis. |

4.3 Estimated Costs

The budgeted project costs are provided below:

| | |
|---|------------------------|
| Mobilization, Project Management, Sampling, Reporting | \$4,925,053.74 |
| Excavation, Transportation, Backfill, & Erosion Control | \$32,306,825.73 |
| Performance and Payment Bonds | \$332,480.00 |
| Project Management and Quality Control | \$ 3,541,986.16 |
| Subtotal | \$37,564,359.47 |
| Contingency | \$3,756,435.95 |
| Total | \$44,862,782.02 |

5. Expected Change Should Action Be Delayed or Not Taken

Delay of the proposed actions will allow a continued unabated release or threatened release of hazardous substances from some Greenville properties and potential exposure to sensitive populations, especially children under seven years of age.

6. Outstanding Policy Issues

None.

7. Enforcement

This TCRA will be implemented by DTSC and its contractors.

8. Compliance with the California Environmental Quality Act (CEQA)

DTSC determined the TCRA was exempt from CEQA. DTSC's CEQA Notice of Exemption (NOE), dated July 26, 2022, explained the TCRA is exempt from CEQA because a release or threatened release of a hazardous substance posed "an imminent or substantial endangerment to the public health or welfare or to the environment," and the TCRA is "necessary to prevent or mitigate an emergency."¹⁴ In July 2022, DTSC finalized the TCRA WP and associated NOE for the eligible properties within Greenville and filed the NOE with the State Clearinghouse.

9. Recommendation

The TCRA should be implemented to address the public health or environmental risks posed by Greenville properties with lead concentrations exceeding DTSC's residential or commercial screening levels. The response proposed is in accordance with the applicable statutory and regulatory removal provisions discussed above. Conditions at those properties meet the NCP criteria for a removal action.¹⁵ This decision is based on the administrative record.¹⁶ The administrative record is available for public review per statutory mandate.

¹⁴ See *also* Public Resources Code, § 21080(b)(4); California Code of Regulations, title 14 (14 CCR), §§ 15061(b)(1), 15062, 15269(c).

¹⁵ 40 CFR, § 300.415(b)(2).

¹⁶ The administrative record for the DTSC – Greenville Soil Removal Project may be accessed on EnviroStor using the following link:

https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60003346.

REFERENCES

Agency for Toxic Substances and Disease Registry (ATSDR), 2007, ToxFAQs Fact Sheet – Lead (CAS #7439-92-1).

DTSC, August 2008. *Proven Technologies & Remedies Guidance, Remediation of Metals in Soil.*

DTSC, June 2022. *Imminent and Substantial Endangerment Determination, Dixie Wildfire Cleanup Area, Greenville, California 95947.*

DTSC, July 2022. *California Environmental Quality Act – Notice of Exemption, Greenville – Time Critical Removal Action, Greenville, California.*

DTSC, August 2022. *Prioritization Criteria, Soil Cleanup Program, Greenville, Plumas County, California.*

Engineering/Remediation Resources Group, Inc. (ERRG), 2022. *Greenville – Time Critical Removal Action Work Plan – Residential and Commercial Properties – ERRG Addendum, Greenville, California.*

TetraTech, December 2021. *Northern Division Fires, Contract DRR21048, Lassen, Plumas, Siskiyou, Tehama, Trinity Counties, California, Background Sampling and Cleanup Goals Report, Version 2.*

FIGURES

Figure 1. Plumas County Location Map

Figure 2. Greenville Location Map

Figure 3. Greenville Site Extents

APPENDICES

Appendix A: CalOES, Consolidated Debris Removal Program – Maximum Lead Concentration Summary

Appendix B: Property Specific Plan Template

Figures

Figure 1. Plumas County Location Map



Figure 2: Greenville Location Map
Red line: outline of Greenville

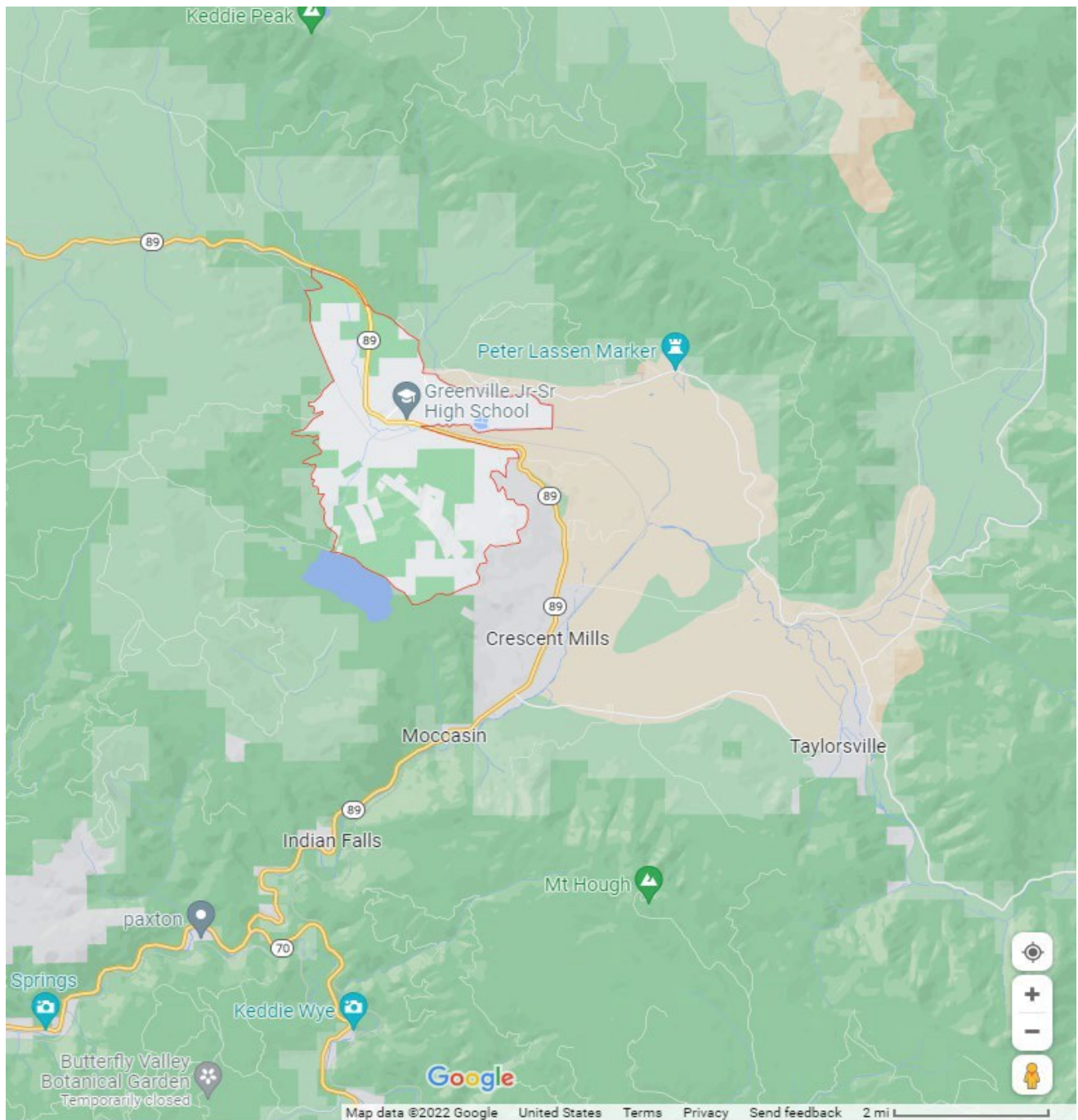
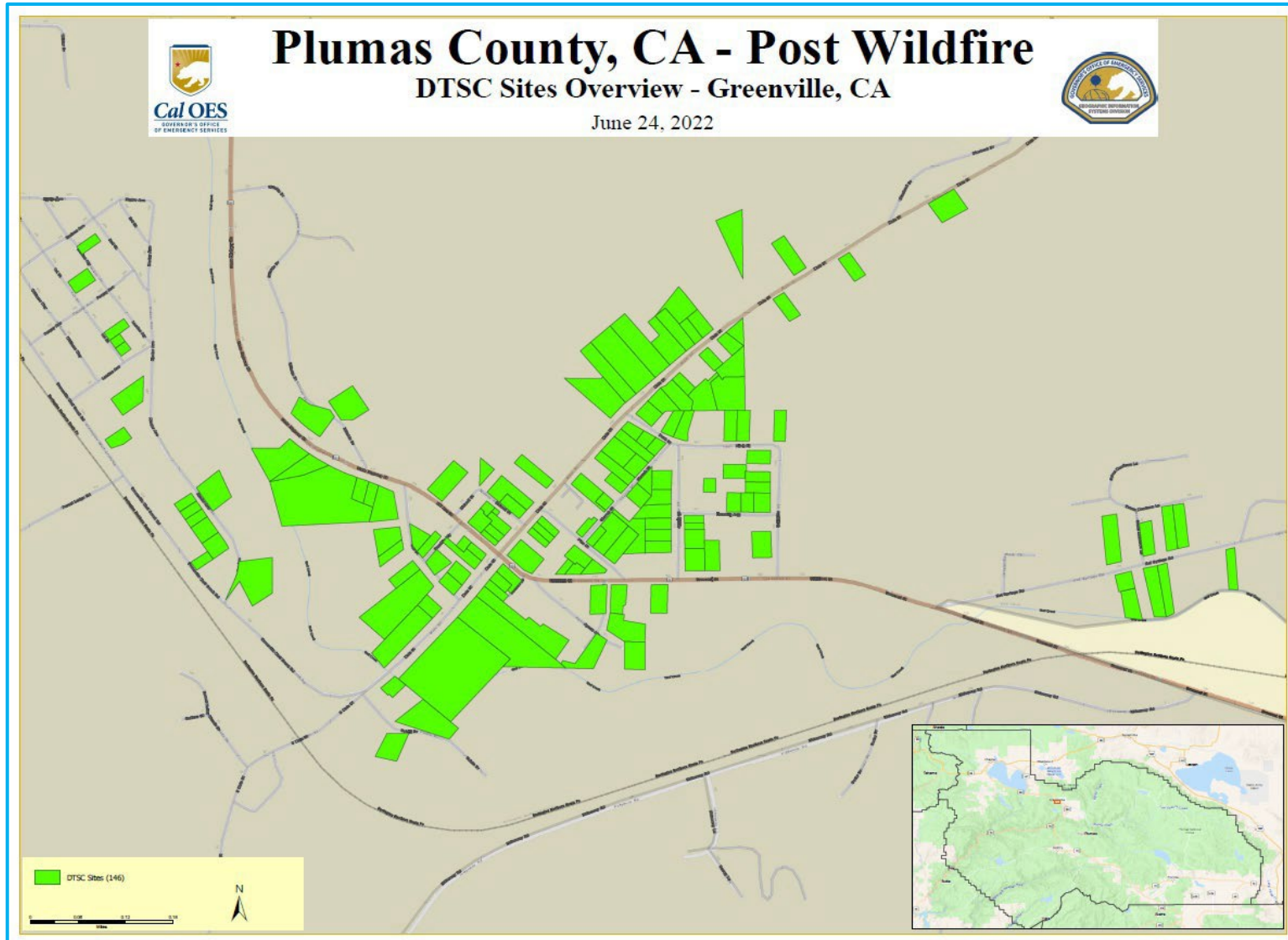


Figure 3: Greenville Site Extents



Appendix A

Consolidated Debris Removal Program Maximum Lead Concentration Summary

***Notes:**

Debris footprint samples = Five-part composite soil samples that were collected at the bottom of the burn scar after ash and debris were removed and soil was scraped.

On-site Soil Borings = Soil borings collected on a property. These borings may have been collected before or after debris removal was conducted. Soil boring samples were typically collected from the 3- to 6-inch, the 6- to 9-inch, and the 9- to 12-inch depth intervals.

Sample depths are relative to ground surface at the time the sample is collected; a reference to original grade is not provided.

**Table A-1. Debris Removal Program
Maximum Lead Concentration Summary**

| APN | Debris Removal Program Maximum Lead Concentration (mg/kg) | |
|-------------------|--|---------------------|
| | Debris Footprint | On-site Soil Boring |
| 110-016-003 | 110 | 130 |
| 110-016-009 | 98 | |
| 110-019-004 | 150 | 120 |
| 110-019-005 | 91.5 | |
| 110-019-006 | 200 | |
| 110-022-006 | 130 | 130 |
| 110-031-015 | 150 | |
| 110-032-005 | 85 | |
| 110-032-006 | 82 | |
| 110-032-007 | 88 | |
| 110-032-008 | 90 | |
| 110-032-014 | 180 | |
| 110-032-024 | 95 | |
| 110-032-033 | 100 | |
| 110-040-011 | 240 | |
| 110-040-012 | 270 | |
| 110-040-014 | 110 | |
| 110-040-015 | 130 | |
| 110-040-018 | 150 | |
| 110-040-029_House | 230 | |
| 110-051-004 | 190 | |
| 110-051-005 | 120 | |
| 110-051-006 | 240 | |
| 110-051-007 | 160 | |
| 110-051-008 | 210 | |
| 110-051-009 | 81 | |
| 110-052-001 | 87 | 130 |
| 110-052-005 | 93 | |
| 110-061-004 | 270 | |
| 110-061-005 | 290 | |
| 110-061-007 | 250 | |
| 110-061-012 | 230 | |
| 110-061-013 | 210 | 320 |
| 110-061-015 | 180 | 300 |
| 110-061-018 | 218 | |
| 110-062-013 | 1400 | |
| 110-062-015 | 170 | 190 |
| 110-062-022 | 630 | |
| 110-062-025 | 180 | |
| 110-062-026 | 160 | |

**Table A-1. Debris Removal Program
Maximum Lead Concentration Summary**

| APN | Debris Removal Program Maximum Lead Concentration (mg/kg) | |
|-------------|--|---------------------|
| | Debris Footprint | On-site Soil Boring |
| 110-062-027 | 280 | 200 |
| 110-062-030 | 140 | 160 |
| 110-062-033 | 210 | 120 |
| 110-062-036 | 650 | 5300 |
| 110-062-037 | 390 | |
| 110-062-039 | 160 | |
| 110-063-004 | 190 | |
| 110-063-006 | 120 | |
| 110-063-007 | 95 | 1200 |
| 110-063-011 | 200 | |
| 110-063-012 | 230 | 310 |
| 110-063-013 | 340 | |
| 110-063-016 | 300 | |
| 110-063-017 | 250 | |
| 110-064-001 | 270 | |
| 110-064-005 | 310 | |
| 110-064-008 | 290 | |
| 110-064-009 | 570 | |
| 110-064-010 | 600 | |
| 110-064-012 | 170 | |
| 110-064-013 | 390 | 630 |
| 110-064-017 | 240 | 110 |
| 110-064-018 | 250 | 230 |
| 110-064-020 | 370 | |
| 110-064-022 | 150 | |
| 110-071-003 | 110 | |
| 110-071-004 | 210 | |
| 110-071-005 | 170 | |
| 110-071-006 | 240 | |
| 110-071-007 | 340 | |
| 110-071-012 | 170 | |
| 110-071-013 | 310 | |
| 110-071-014 | 210 | |
| 110-072-005 | 150 | |
| 110-072-006 | 140 | |
| 110-072-008 | 270 | |
| 110-072-009 | 84 | |
| 110-072-010 | 100 | |
| 110-072-011 | 180 | |
| 110-072-014 | 290 | 370 |

**Table A-1. Debris Removal Program
Maximum Lead Concentration Summary**

| APN | Debris Removal Program Maximum Lead Concentration (mg/kg) | |
|------------------------|--|---------------------|
| | Debris Footprint | On-site Soil Boring |
| 110-072-019 | 320 | |
| 110-072-024 | 160 | |
| 110-072-027 | 140 | |
| 110-072-028 | 170 | |
| 110-072-031 | 270 | 120 |
| 110-072-032 | 300 | |
| 110-072-035 | 230 | |
| 110-072-036 | 250 | |
| 110-081-004 | 170 | |
| 110-081-010 | 160 | |
| 110-082-001 | 100 | 190 |
| 110-082-013 | 90 | |
| 110-082-016 | 130 | |
| 110-110-001 | 250 | |
| 110-110-007 | 320 | |
| 110-110-015 | 220 | |
| 110-110-018_Mobilehome | 290 | |
| 110-110-019 | 400 | 73000 |
| 110-120-004 | 100 | 230 |
| 110-120-010 | 220 | |
| 110-120-022 | 320 | |
| 110-120-031 | 130 | |
| 110-120-033 | 380 | |
| 110-120-044 | 270 | 840 |
| 110-120-049 | 200 | 160 |
| 110-131-002 | 170 | 290 |
| 110-131-011 | 382 | 460 |
| 110-131-015 | 220 | |
| 110-131-016 | 430 | |
| 110-131-017 | 430 | |
| 110-131-018 | 190 | |
| 110-131-020 | 280 | |
| 110-131-021 | 130 | 160 |
| 110-131-022 | 180 | |
| 110-131-023 | 360 | 440 |
| 110-131-024 | 81 | |
| 110-131-025 | 200 | |
| 110-132-004 | 110 | |
| 110-132-006 | 110 | |
| 110-132-007 | 210 | |

**Table A-1. Debris Removal Program
Maximum Lead Concentration Summary**

| APN | Debris Removal Program Maximum Lead Concentration (mg/kg) | |
|-------------|--|---------------------|
| | Debris Footprint | On-site Soil Boring |
| 110-132-008 | 350 | |
| 110-132-009 | 270 | |
| 110-132-010 | 87 | 100 |
| 110-132-017 | 250 | |
| 110-132-026 | 160 | 440 |
| 110-132-038 | 330 | |
| 110-132-039 | 200 | |
| 110-132-041 | 210 | |
| 110-132-043 | 170 | |
| 110-132-044 | 250 | |
| 110-132-045 | 370 | |
| 110-161-009 | 100 | |
| 110-162-009 | 110 | 130 |
| 110-162-011 | 85 | 200 |
| 110-171-003 | 87 | |
| 110-171-017 | 100 | |
| 110-172-002 | 97 | |
| 110-172-003 | 94 | |
| 110-172-009 | 120 | |
| 110-210-001 | 95 | 140 |
| 110-210-004 | 540 | 3500 |
| 110-210-005 | 85 | |
| Minimum = | 81 | 100 |
| Maximum = | 1400 | 73000 |

APPENDIX B
Property Specific Plan - Template

**Greenville Time-Critical Removal Action
Property-Specific Plan for
[Address]
Assessor's Parcel Number: [APN]**

[Month] 2022

ERRG Project: 20220062
DTSC Contract: 22-T5106
Work Order: 1-106-1.0-102472

Prepared for:



Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826

Prepared by:



ERRG

Engineering/Remediation Resources Group, Inc.
9727 Business Park Dr., Suite A
Sacramento, California 95827
(925) 969-0750

**Greenville Time-Critical Removal Action
Property-Specific Plan for
[Address]
Assessor's Parcel Number: [APN]**

*Submitted by:
Engineering/Remediation Resources Group, Inc.*

Signature

Date

Name

DTSC Authorization Signature

Title

Signature

Date

Name

ERRG Authorization Signature

Title

Table of Contents

| | |
|--|------------|
| SECTION 1. PROPOSED SITE ACTIVITY SUMMARY | 1-1 |
| 1.1. Proposed Schedule | 1-1 |
| 1.2. Proposed Work Zones | 1-1 |
| 1.3. Proposed Soil Excavation Area and Volume | 1-1 |
| 1.4. Proposed Backfill Area and Volume | 1-2 |
| SECTION 2. PROPOSED SITE SAMPLING SUMMARY | 2-1 |
| 2.1. Waste Profile Sample Locations | 2-1 |

List of Appendices

| | |
|-----------|---|
| Figure 1. | Proposed Work Zones and Confirmation Sampling Areas |
| Figure 2. | Proposed Soil Excavation Areas |
| Figure 3. | Sample Locations |

Section 1. Proposed Site Activity Summary

[Text describing the property and the remaining features (if any).]

[Also include any specific landowner requests or priority considerations here.]

1.1. PROPOSED SCHEDULE

| Activity | Estimated Date(s) |
|--|--|
| Initial Site Condition Assessment | TBD |
| Site Survey | TBD |
| Waste Profile Sampling | TBD |
| Site Inspection | TBD |
| Archaeological and/or Biological Survey (if needed) | Biological Survey – TBD Archaeological Survey – TBD |
| Utility Clearance | TBD |
| Excavation | TBD |
| Backfill | TBD |
| BMPs | TBD |
| Closeout Site Walk | TBD |
| Completion | TBD |

[Text (if needed)]

1.2. PROPOSED WORK ZONES

[Text describing staging and work zone areas]

[Insert Figure/Field Sketch showing proposed work zones and staging areas]

1.3. PROPOSED SOIL EXCAVATION AREA AND VOLUME

[Insert Sample Location Figure/Field Sketch]

[Text describing the area to be excavated, areas previously excavated, and excavation to be performed]

| Previous Excavation (Performed by Others) | | | | |
|---|-----------------|------------------|------------------|-------------------|
| Excavation Area | | Excavation Depth | Estimated Volume | |
| | | | | |
| | | | | |
| | | | | |
| Proposed Additional Excavation Areas | | | | |
| Waste Stream | Excavation Area | Excavation Depth | Estimated Volume | Estimated Acreage |
| | | | | |
| | | | | |
| | | | | |
| Total Proposed Excavation Volume: | | | | |

Notes:

Excavation volume estimates were calculated using measurements of previous excavations obtained during the initial site condition assessment.

DTSC used conversion factor of 1 yd³ = 1.5 tons.

Actual excavation extents and quantities will be included in the property completion report.

1.4. PROPOSED BACKFILL AREA AND VOLUME

[Insert Sample Location Figure/Field Sketch (if needed)]

[Text (if needed)]

| Backfill Area | Backfill Depth | Estimated Volume | Estimated Acreage |
|----------------------------------|----------------|------------------|-------------------|
| | | | |
| | | | |
| | | | |
| Estimated Total Backfill Volume: | | | |

Notes:

Backfill volume estimates were calculated based on field measurements and estimated excavation quantities.

Section 2. Proposed Site Sampling Summary

2.1. WASTE PROFILE SAMPLE LOCATIONS

[Text with brief description of waste profile sample methodology]

[Insert Sample Location Figure/Field Sketch.]

Waste profile sample results above reporting limits are presented in the table below:

| Location | Sample ID | Analysis | Analyte | Result |
|----------|-----------|----------|---------|--------|
| | | | | |
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Notes:

Sample results are presented in [units].

Full waste confirmation results can be found in the completion report.

[Text describing the waste profile sample results. Include waste classification and the proposed landfill]

**Figure 1. Proposed Work Zones and
Confirmation Sampling Areas**

Figure 2. Proposed Soil Excavation Areas

Figure 3. Sample Locations
